



# Marshmallow Shooter

Written By: Howtoons

## **TOOLS:**

- [PVC pipe cutter \(1\)](#)

*if you're cutting your own PVC. If you're using the Make: Marshmallow Shooter Kit (2-Pack) you don't need any tools at all.*

- [Paper \(1\)](#)
- [Pencil \(1\)](#)
- [Ruler \(1\)](#)
- [Sandpaper \(1\)](#)
- [Vise \(1\)](#)

*if cutting your own PVC*

## **PARTS:**

- [Make Marshmallow Shooter Kit \(2-Pack\) \(1\)](#)

*Contains all the parts listed below for making 2 shooters (except marshmallows!), plus a bit of sandpaper*

- [PVC pipe, 1/2" \(1\)](#)  
*With PVC pipe and fittings, a nominal diameter of 1/2" refers to its internal diameter (ID). The pipe's outer diameter is closer to 7/8", and the fittings are sized to fit around this.*
- [PVC pipe fittings, 1/2" \(1\)](#)
- [Marshmallows \(1\)](#)

## **SUMMARY**

Here's how to make a pair of Marshmallow Shooters. You'll be ready for combat in minutes!

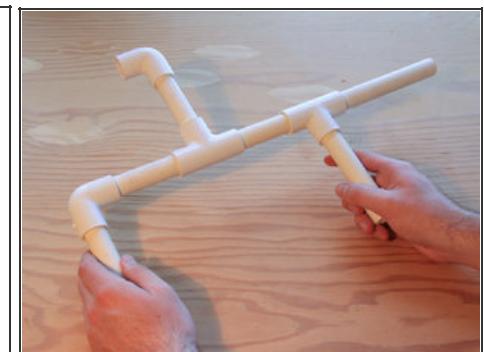
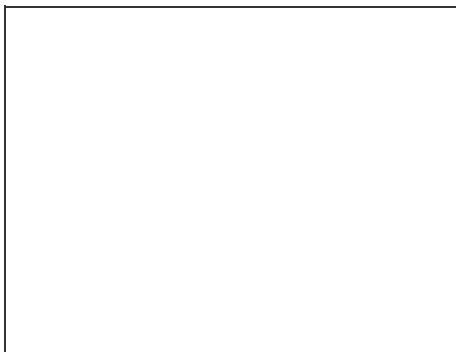
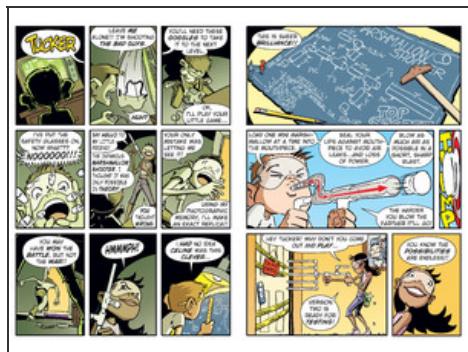
They're made of standard 1/2" PVC pipe and pipe fittings, which just happen to be a perfect fit for mini marshmallows from the grocery store.

Just fit the pieces together, bring a bag of mini marshmallow ammunition, and start blasting.

They can shoot 40 feet or more with just a puff of air.

Everyone is delighted by the weird physics of the Marshmallow Shooter. You load the mini marshmallow at the mouthpiece, and then blow sharply. Surprisingly, the marshmallow follows the curves inside the shooter and finds its way out the end of the barrel, no matter how crazy a shooter you build!

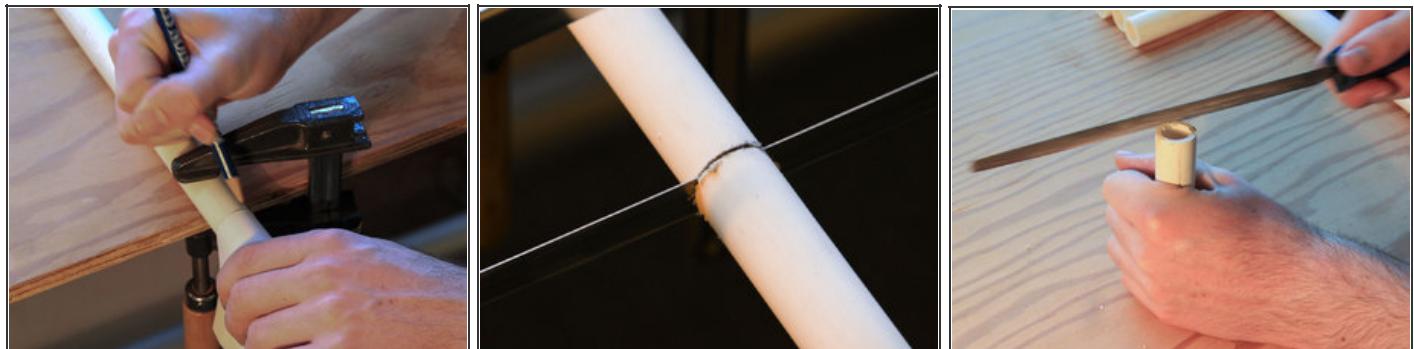
## Step 1 — Make your marshmallow shooters.



- Click "View huge" in the upper left corner of the Howtoons comic to see it full size!
- **Marshmallow Shooter Kit:** Press-fit the parts together as shown in the assembly drawing — no tools or glue are needed. That's it!
- For comfort, you can sand the edges of the 4" pipe for the mouthpiece.
- WARNING — CHOKING HAZARD. Small parts. Not for children under 3 years.



## Step 2



- **From scratch:** On the PVC pipe, measure and mark one 6" length of pipe and five 4" lengths. Wrap a small piece of paper evenly around the pipe at each mark and use the paper's edge as a guide to mark the pipe all the way around.
- Use a hacksaw to cut the pipe evenly along the marks you made. Hold the pipe in a vise during cutting, or clamp it to the edge of a table. Either way, it should be secured right next to the cut line. Cut with even strokes and slight pressure against the PVC.
- Use a file or sandpaper to square the cut ends of the PVC, smooth away sharp edges, and remove burrs.
- Lay out your pieces as shown in the plan and assemble them. Just press them together firmly. Friction should hold them all together.

### Step 3 — Fire your marshmallow shooters.



- Load one mini marshmallow at a time into the mouthpiece. Seal your lips against the mouthpiece to avoid air leaks ... and loss of power.
- Blow as much air as possible in a short, sharp blast. The harder you blow, the farther it'll go!
- SAFETY WARNING: For adult supervision. Stand still and use goggles. (Learn how to make [Soda Bottle Goggles here.](#)) 
- Keep your ammunition sealed. Dried-up marshmallows don't work very well. 

## Step 4 — Customize your marshmallow shooters.



- The basic Marshmallow Shooters in this kit are just the beginning. You can customize to give them their own personality, show off your creative abilities, and even increase their performance. Here are a few ideas — what will you come up with?
  - **Style your shooter** with paint, markers, or colored duct tape.
  - **Add more twists and turns** to your shooter by visiting the plumbing aisle at your local hardware store to find more pipe and fittings. See how wild your shooter can get!
  - **Experiment with barrels** of different lengths, and even multiple barrels. (Tip: A longer barrel can provide greater acceleration.)
  - You can also make [Soda Bottle Goggles](#) for ferocious marshmallow combat.



Clean up your marshmallows when you're done. Especially, don't leave any around roads: they'll attract animals, which might then be hit by cars.

This project first appeared in [MAKE Volume 02](#).

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